



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2022-0096; Project Identifier MCAI-2021-01092-R]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive (AD) 2020-22-01 which applies to all Airbus Helicopters Model AS332C, AS332C1, AS332L, and AS332L1 helicopters. AD 2020-22-01 requires inspecting the affected parts and associated frame bores for discrepancies, applicable corrective actions, and reporting certain information if necessary. Since the FAA issued AD 2020-22-01, a significant number of reports were received of finding corrosion on the affected parts. This proposed AD would retain the requirements of AD 2020-22-01, add recurring inspections, and update the applicable service information. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX, 75052, telephone: (972) 641-0000; or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0096; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the European Union Aviation Safety Agency (EASA) AD, any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email [andrea.jimenez@faa.gov](mailto:andrea.jimenez@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES. Include “Docket No. FAA-2022-0096; Project Identifier MCAI-2021-01092-R” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any

personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email [andrea.jimenez@faa.gov](mailto:andrea.jimenez@faa.gov). Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Background**

The FAA issued AD 2020-22-01, Amendment 39-21297 (85 FR 69126, November 2, 2020), (AD 2020-22-01), for all Airbus Helicopters Model AS332C, AS332C1, AS332L, and AS332L1 helicopters. AD 2020-22-01 requires, within certain compliance times specified in the manufacturers service information, inspecting the attachment fittings and attachment screws of the main gearbox (MGB) suspension bars and their frame bores for discrepancies and corrective actions in accordance with the actions specified in the service information. AD 2020-22-01 also requires sending certain information to the manufacturer. AD 2020-22-01 resulted from reports of corrosion on attachment screws and fittings fastening the MGB suspension bars to the fuselage. The FAA issued AD 2020-22-01 to address corrosion on attachment fittings and attachment screws for the MGB suspension bars.

AD 2020-22-01 was prompted by EASA AD 2019-0295, dated December 5, 2019 (EASA AD 2019-0295), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for all Airbus Helicopters Model AS 332 C, AS 332 C1, AS 332 L, and AS 332 L1 helicopters, all manufacturer serial numbers. EASA advised that there were reports of corrosion on attachment screws and fittings fastening the rear MGB suspension bars, right and left hand sides, to the fuselage, and the attachment screws and fitting fastening the front MGB suspension bar to the fuselage. EASA advised that subsequent investigation determined that during maintenance visits of an identified batch of helicopters between September 2012 and April 2019, application of compound sealant on MGB suspension bar attachment screws may not have been accomplished using the approved maintenance data. This condition, if not addressed, could lead to structural failure of the MGB attachment screws, resulting in detachment of MGB suspension bars from the fuselage and subsequent loss of control of the helicopter.

Accordingly, EASA AD 2019-0295 required a one-time inspection of the affected parts, and depending on findings, accomplishment of applicable corrective actions. The compliance times varied depending on helicopter configuration.

#### **Actions Since AD 2020-22-01 Was Issued**

Since the FAA issued AD 2020-22-01, EASA issued EASA AD 2021-0222, dated October 6, 2021 (EASA AD 2021-0222), which supersedes EASA AD 2019-0295. EASA advises a significant number of reports were received about corrosion being detected on the affected parts. EASA also advises Airbus Helicopters issued updated service information, which includes instructions for repetitive inspections. Accordingly, EASA AD 2021-0222 retains the requirements of EASA AD 2019-0295 and adds repetitive inspections and updated service information. Additionally, Airbus Helicopters advised of a typo in the applicable service information in the reference to G.2 of one of the work cards. Accordingly, the FAA has identified this typo in the exceptions in the regulatory text of this proposed AD.

#### **FAA's Determination**

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

#### **Related Service Information Under 1 CFR Part 51**

The FAA reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. AS332-53.02.05, Revision 2, and ASB No. AS332-53.02.07, Revision 1, both dated August 19, 2021, which specify procedures for inspecting the attachment fittings and attachment screws of the MGB suspension bars and their frame bores for discrepancies and corrective actions. This inspection includes inspecting the attachment fittings for corrosion and inspecting the attachment screws for corrosion and evidence of sealing compound. The corrective actions include replacing or repairing corroded parts and replacing screws that have sealing compound on them. These documents are distinct since they apply to different helicopter models in different configurations.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Other Related Service Information**

The FAA also reviewed Airbus Helicopters ASB No. AS332-53.02.05, Revision 0, dated April 18, 2019; Airbus Helicopters ASB No. AS332-53.02.05, Revision 1, dated March 2, 2020; and Airbus Helicopters ASB No. AS332-53.02.07, Revision 0, dated October 21, 2019, which also specify procedures for inspecting the attachment fittings and attachment screws of the MGB suspension bars and their frame bores for discrepancies and corrective actions.

#### **Proposed AD Requirements**

This proposed AD would retain all requirements of AD 2020-22-01. This proposed AD would add repetitive inspections and update the applicable service

information. This proposed AD would require accomplishing the actions specified in the service information described previously.

### **Costs of Compliance**

The FAA estimates that this AD would affect 10 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this proposed AD.

Inspecting each attachment screw and fitting of the rear MGB suspension bars; each attachment screw and fitting of the front MGB suspension bar; and the frame bores would take about 16 work-hours, for an estimated cost of \$1,360 per helicopter and \$13,600 for the U.S. fleet per inspection cycle.

The FAA estimates the following costs to do any necessary on-condition corrective actions that would be required based on the results of the inspection. The agency has no way of determining the number of helicopters that might need these on-condition replacements:

If required, replacing an affected screw, nut, split pin, concave washer, convex washer, or peel shim would take a minimal amount of time with a minimal cost.

If required, replacing an affected MGB attachment fitting would take about 8 work-hours and parts would cost about \$7,000 for an estimated cost of \$7,680 per replacement.

If required, reporting any discrepancies to Airbus Helicopters would take about 1 work-hour for an estimated cost of \$85 per helicopter.

### **Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response,

including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

The FAA has determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive AD 2020-22-01, Amendment 39-21297 (85 FR 69126, November 2, 2020); and

b. Adding the following new airworthiness directive:

**Airbus Helicopters:** Docket No. FAA-2022-0096; Project Identifier MCAI-2021-01092-R.

#### **(a) Comments Due Date**

The FAA must receive comments on this airworthiness directive (AD) action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD replaces AD 2020-22-01, Amendment 39-21297 (85 FR 69126, November 2, 2020) (AD 2020-22-01).

#### **(c) Applicability**

This AD applies to all Airbus Helicopters Model AS332C, AS332C1, AS332L, and AS332L1 helicopters, certificated in any category.

#### **(d) Subject**

Joint Aircraft System Component (JASC) Code 5340, Fuselage main, attach fittings.



**(e) Reason**

This AD was prompted by reports of corrosion on attachment screws and fittings fastening the main gearbox (MGB) suspension bars to the fuselage. The FAA is issuing this AD to address corrosion on attachment fittings and attachment screws for the MGB suspension bars. The unsafe condition, if not addressed, could lead to structural failure of the MGB attachment screws, resulting in detachment of MGB suspension bars from the fuselage and subsequent loss of control of the helicopter.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Definitions**

Affected parts are attachment screws and fitting(s) fastening the parts identified in paragraphs (g)(1) and (2) of this AD.

(1) Rear MGB suspension bars, right and left sides, to the fuselage.

(2) Front MGB suspension bar to the fuselage.

**(h) Repetitive Inspections**

Except as specified in paragraphs (j)(1) through (10) of this AD: Within the applicable compliance times identified in paragraphs (h)(1) or (2) of this AD, inspect each affected part and its frame bores for discrepancies, in accordance with the Accomplishment Instructions, paragraphs 3.B.2. through 3.B.2.b.3 of Airbus Helicopters Alert Service Bulletin (ASB) No. AS332-53.02.05, Revision 2, dated August 19, 2021 (ASB AS332-53.02.05 Rev 2); or in accordance with the Accomplishment Instructions, paragraphs 3.B.2. through 3.B.2.d. of Airbus Helicopters ASB No. AS332-53.02.07, Revision 1, dated August 19, 2021 (ASB AS332-53.02.07 Rev 1), as applicable to your model helicopter. For the purposes of this inspection, a discrepancy may be indicated by corrosion on the MGB attachment fitting or by sealing compound on the attachment screws.

(1) Perform the initial inspection within the applicable compliance times identified in the “Deadlines” column of Tables 1 through 4, as applicable, of paragraph 1.E.2, “Compliance in service,” of ASB AS332-53.02.05 Rev 2, and thereafter, at

intervals not to exceed the compliance time identified in the “Periodicity” column of Table 1 through 4, as applicable.

(2) Perform the initial inspection within the applicable compliance times identified in the “Deadlines” column of Tables 1 and 2, as applicable, of paragraph 1.E.2, “Compliance in service,” of ASB AS332-53.02.07 Rev 1, and thereafter, at intervals not to exceed the compliance time identified in the “Periodicity” column of Table 1 and 2, as applicable.

**(i) Corrective Action**

Except as required by paragraphs (j)(7) through (10) of this AD: If, during any inspection required by paragraph (h) of this AD, there is any discrepancy, before further flight, perform the applicable corrective action (including replacing or repairing corroded parts and replacing screws that have sealing compound on them), in accordance with the Accomplishment Instructions, paragraphs 3.B.2. through 3.B.2.b.3 of ASB AS332-53.02.05 Rev 2 or in accordance with the Accomplishment Instructions, paragraphs 3.B.2. through 3.B.2.d. of ASB AS332-53.02.07 Rev 1, as applicable.

**(j) Exceptions to Service Information Specifications**

(1) Where Tables 1 and 3 of ASB AS332-53.02.05 Rev 2 use the phrase “receipt of Revision 0 of this Alert Service Bulletin issued April 18, 2019,” this AD requires using December 7, 2020 (the effective date of AD 2020-22-01).

(2) Where Table 1 of ASB AS332-53.02.07 Rev 1 uses the phrase “receipt of Revision 0 of this Alert Service Bulletin,” this AD requires using December 7, 2020 (the effective date of AD 2020-22-01).

(3) Where Tables 2 and 4 of ASB AS332-53.02.05 Rev 2 use the phrase “receipt of Revision 2 of this Alert Service Bulletin,” this AD requires using the effective date of this AD.

(4) Where Table 2 of ASB AS332-53.02.07 Rev 1, uses the phrase “that follow receipt of Revision 1 of this Alert Service Bulletin,” this AD requires using the effective date of this AD.

(5) Where Tables 2 and 4 of ASB AS332-53.02.05 Rev 2, and Table 2 of ASB AS332-53.02.07 Rev 1, specify certain configurations in the “Configuration” column, this AD requires compliance for those configurations as of the effective date of this AD.

Note 1 to paragraph (h)(5): An example for the exception specified in (h)(5) of this AD is where a service bulletin specifies, “3700 flight hours or more since compliance with this Alert Service Bulletin,” use “3700 flight hours or more since compliance with this Alert Service Bulletin as of the effective date of this AD.”

(6) Where Tables 1 and 3 of ASB AS332-53.02.05 Rev 2, and Table 1 of ASB AS332-53.02.07 Rev 1, specify certain configurations in the “Configuration” column, this AD requires compliance for those configurations as of December 7, 2020 (the effective date of AD 2020-22-01).

(7) Where the Accomplishment Instructions, paragraph 3.B.2.b.3) of ASB AS332-53.02.05 Rev 2, and the Accomplishment Instructions, paragraph 3.B.2.b.2) of ASB AS332-53.02.07 Rev 1 specify performing a check of the condition of the bores and frames, for this AD for ASB AS332-53.02.05 Rev 2 replace the text, “Perform a check of the state of the frame bores as per paragraph G.2. of the Work Card 53-10-00-402 (MET),” with “Perform a check of the state of the frame bores as per paragraph F.2.b.(2) of the Work Card 53-10-00-402 (MET);” and for ASB AS332-53.02.07 Rev 1 replace the text, “Check the condition of the bores and the frames using the endoscope (yy) as per paragraph G.2. of Work Card 53-10-00-402 (MET),” with “Check the condition of the bores and the frames using the endoscope (yy) as per paragraph F.2.b.(2) of Work Card 53-10-00-402 (MET).”

(8) Where ASB AS332-53.02.05 Rev 2 and ASB AS332-53.02.07 Rev 1 specify discarding parts, you are not required to discard parts.

(9) Where ASB AS332-53.02.05 Rev 2 and ASB AS332-53.02.07 Rev 1 specify contacting Airbus Helicopters for repair instructions, this AD requires repair done in accordance with a method approved by the Manager, General Aviation and Rotorcraft Section, International Validation Branch, FAA; or EASA; or Airbus Helicopters’ EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(10) Where ASB AS332-53.02.05 Rev 2, and ASB AS332-53.02.07 Rev 1, specify if sealing compound is present, or if no sealing compound is present but there is corrosion, take a photo, place the part in quarantine, and contact Airbus Helicopters for repair instructions, this AD requires repair done in accordance with a method approved by the Manager, General Aviation and Rotorcraft Section, International Validation Branch, FAA; or EASA; or Airbus Helicopters' EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature. This AD does not require taking a photo or placing the part in quarantine.

**(k) Reporting**

If, during any inspection required by paragraph (h) of this AD, there is any discrepancy, report the inspection results to Airbus Helicopters at the applicable time specified in paragraphs (k)(1) or (2) of this AD. The report should include the information specified in Appendix 4.A. of Airbus Helicopters ASB AS332-53.02.05 Rev 2; or ASB AS332-53.02.07 Rev 1, as applicable.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

**(l) Credit for Previous Actions**

(1) For helicopters identified in ASB AS332-53.02.05 Rev 2: This paragraph provides credit for initial inspections required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Airbus Helicopters ASB AS332-53.02.05, Revision 1, dated March 2, 2020, or Airbus Helicopters ASB AS332-53.02.05, Revision 0, dated April 18, 2019.

(2) For helicopters identified in ASB AS332-53.02.07 Rev 1: This paragraph provides credit for initial inspections required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Airbus Helicopters ASB AS332-53-02.07 Revision 0, dated October 21, 2019.

**(m) Special Flight Permit**

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199, provided no passengers are onboard.

**(n) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (o)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(o) Related Information**

(1) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email [andrea.jimenez@faa.gov](mailto:andrea.jimenez@faa.gov).

(2) For service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX, 75052, telephone: (972) 641-0000; or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(3) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD 2021-0222, dated October 6, 2021, for more information. You may view the EASA AD on the Internet at <https://www.regulations.gov> in Docket No. FAA-2022-0096.

Issued on February 4, 2022.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2022-02768 Filed: 2/9/2022 8:45 am; Publication Date: 2/10/2022]